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09/580,665

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Ian Crayford

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EXAMINER

BAROT, BHARAT

ART UNIT

PAPER NUMBER

2155

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/580,665

Applicant(s)

CRAYFORD ET AL.

Examiner

Bharat N. Barot

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

RESPONSE TO AMENDMENT

1. Amended claims 1-42 remain for further examination.

The new grounds of rejection

2. Applicants' amendments and arguments with respect to claims 1-42 filed on October 26, 2007 have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Drawings

3. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103(a)

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-14 and 21-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kristol et al (U.S. Patent No. 5,541,927) in view of Watson et al (US Patent No. 6,631,409).

6. As to claim 1, Kristol et al disclose a network hub in a communication network comprising a server, the server (source) configured to push status packet to a client (destination) (figures 3-6; and column 4 line 31 to column 6 line 19).

However, Kristol et al do not explicitly disclose that the server configured to detect status information from the communication network and push the status information to a client without a request for the status information from the client, wherein the status information comprises network information.

Watson et al explicitly disclose a server, in a communication network, configured to detect status information from the communication network (see abstract; figures 3-4; and column 4 line 48 to column 5 line 40) and push the status information to a client without a request for the status information from the client, wherein the status information comprises network information comprises information about the communication network (see abstract; figures 10C-10D and 112; column 8 line 30 to column 9 line 26; and column 10 line 52 to column 11 line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Watson et al as stated above with the network hub of Kristol et al for pushing status information to a client because it would have improved control through the information is easily reformatted locally and improved transmission efficiency through pushed without a request and archived for later use.

7. As to claims 2-5, Kristol et al disclose that the server unicasts, broadcasts, and multicasts the status information and transmits the status information to a plurality of clients (column 3 lines 53-59).

8. As to claims 6-7, Kristol et al disclose that the hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof (figure 3; and column 4 lines 31-49); and the network hub comprises one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof (figure 2; and column 3 lines 24-52).

Note: Applicant claimed that the hub comprises one of the network elements or layers; therefore, Kristol et al reference read on the claimed invention and the rejection of claims 6-7 is proper.

9. As to claim 8, Kristol et al disclose that the hub is devoid of a microprocessor (column 3 lines 38-42).

10. As to claims 9-10, Kristol et al disclose that the information comprises a predefined status field; and the predefined status field comprises a push transmission field (figure 6; and column 6 lines 14-19). Malkin et al also disclose that information comprises a predefined status field; and the predefined status field comprises a push transmission field (column 2 lines 1-7; and column 5 line 56 to column 6 line 22).

11. As to claims 11-13, Kristol et al disclose that the hub further comprising a plurality of ports; the operational information comprises a predefined status field; and the predefined status field corresponds to at least one of the plurality of ports (figures 3-4 and 6; column 4 line 31 to column 5 line 12; and column 6 lines 14-19).

12. As to claim 14, Kristol et al disclose that the hub further comprising memory register for storing the information therein (column 7 lines 33-67).

13. As to claim 21-22, above remarks rejecting claim 1 equally apply here. Additionally, Watson et al disclose a communication apparatus (figures 1 and 3; column 3 line 62 to column 4 line 10; and column 4 line 48 to column 5 line 14), comprising: a network information table storing network information from the network information receiver; a network information transmitter selectively push transmitting the network information in the network information table; a network information receiver, operably coupled with a communication network and the network information table, receiving network information; and a network operations analyzer analyzing the networking information in the network information table and producing information of a state of the network (see abstract and summary of the invention; figures 6-7 and 11-12; column 6 line 19 to column 7 line 29; column 9 line 27 to column 10 line 56; and column 11 line 50 to column 12 line 2).

14. As to claim 23-26, Kristol et al disclose that the apparatus comprising a hub, a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof; comprising a plurality of ports coupled to the network information transmitter; and comprising one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof (figures 2-4; column 3 lines 24-52; and column 4 line 31 to column 5 line 12).

15. As to claims 27-28, it would have been obvious matter of design choice to select the number of ports coupled to the network information transmitter for increased the utilization of the communication apparatus (see Watson et al figures 1-4 and columns 3-5).

16. As to claim 29-30, Kristol et al disclose that the apparatus further comprising a transceiver and a switching interface, each of the network information receiver, the network information table, and the at least one of the network information transmitter and the network information detector being integrated into the network hub; and the network hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof (figures 3-4 and 6; column 4 line 31 to column 6 line 2; and column 6 line 14 to column 7 line 67).

17. As to claims 31-40, they are also rejected for the same reasons set forth to rejecting claims 21-30 above. Additionally, Watson et al disclose a network operations detector detecting the networking information and producing operational information of an operational state of the network; and a network information transmitter for transmitting the operational information of an operational state of the network (figures 1-4; and column 4 line 11 to column 5 line 40).

18. As to claim 41, Watson et al disclose that the status information comprises at least one of network status information, hub status information, and server status information (see summary of the invention; figures 3-4; and column 4 line 48 to column 5 line 40).

19. As to claim 42, it is also rejected for the same reasons set forth to rejecting claims 1 above

20. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kristol et al (U.S. Patent No. 5,541,927) in view of Watson et al (US Patent No. 6,631,409) as applied to claims 1 and 9 above, and further in view of Fujino et al (U.S. Patent No. 5,651,006).

21. As to claims 15-20, neither Kristol et al nor Watson et al disclose that the information is a management information base (MIB) statistic.

Fujino et al disclose that the information is a management information base (MIB) statistic; and further comprising a MIB engine, a switching fabric and a transceiver (PHY) integrally contained therein, an address resolution table integrally contained therein, and a MIB engine for pushing the predefined status field (abstract; figure 2; column 3 lines 19-23 and 39-43; column 6 lines 5-34; column 7 lines 1-53; and column 22 lines 18-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujino et al as stated above with the network hub of Kristol et al for pushing status information to a client because it would have provided economically efficient, secure, and balanced communication between source device and destination device.

Response to Arguments

22. Applicant's arguments have been fully considered. The examiner has attempted to answer (response) to the remarks (arguments) in the body of the Office action.

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Contact Information

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.

Bharat Barot.
BHARAT BAROT
PRIMARY EXAMINER

Patent Examiner Bharat Barot

Art Unit 2155

January 23, 2008